

ABSTRACT OF THE DISCLOSURE

A rigid internal gear 2 of the wave gear device is composed by integrating a tooth-forming ring 12 formed with internal teeth, and a main gear ring 11 into a single body. The tooth-forming ring 12 is manufactured from a ferrous or copper material that has superior strength and abrasion resistance, while the main gear ring 11 is manufactured from a lightweight material, such as an aluminum alloy. The outer circumferential surface of the tooth-forming ring 12 is aluminized to form a dispersed aluminum coating 15, before the tooth-forming ring 12 is cast within the main gear ring 11 so as to integrate the main gear ring 11 and the tooth-forming ring 12. Both parts are reliably integrated so that a large amount of torque can be transmitted, whereby realizing a rigid internal gear that is lighter than conventional models.